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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MULCAHY, JOHN M

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 09/24/2002

19

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/370,659

Applicant(s)

HIGUMA ET AL.

tw

Examiner

John M. Mulcahy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-29 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 16-20 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-9, 13-15, 21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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Election/Restriction

1. Claims 10-12, 16-20 and 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 10.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negated by the manner in which the invention was made.

a. Claims 5, 6, 23, 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050).

Ogiyu shows:

As to claim 23: an endoscope capable of being autoclaved, comprising: a first section 3 or 4 and a second section 2, each of the first and second sections having an internal space and an outer casing surrounding said internal space (Fig. 1); and said internal spaces of said first and second sections being in gaseous communication with one another (Fig. 1) and sealed from an ambient space surrounding said outer casing at a first sealing level (watertight) to hinder liquid from invading into the interior thereof while permitting high-pressure, high temperature steam given off during autoclaving to invade into the interior thereof, wherein one or more components 13 are housed in said internal space of said first section.

As to claim 25: said first sealing level seals said internal spaces of said first and second sections in a watertight manner relative to said ambient space. See abstract.

Ogiyu fails to show that at least one of said components is a hermetically sealed unit formed at a second sealing level higher than said first sealing level.

However, Ueda teaches to provide a hermetic (airtight) housing for the image pickup unit in an analogous watertight endoscope (claim 23). The housing is composed of a plurality of airtight partition members 15, 22 including at least one of optical members 18 and electronic parts 24 as airtight partition members (claim 6; see Figs. 2-

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3) sealed hermetically 23. It would have been obvious to the artisan to hermetically seal the image pickup unit 13 of Ogiyu since Ueda teaches such to be advantageous.

Inasmuch as Ogiyu is intended to be autoclaved, it would have been obvious to form the hermetically sealed unit to resist such treatment (claim 5). The limitation of claim 26 would then be inherently met.

b. Claims 2-4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050) as applied to claim 23 above, further in view of the Examiner's official notice.

As to claims 2-4: Ueda fails to specify the details of the hermetic sealing. However, the Examiner takes official notice that the use of e.g. metal, glass or crystalline joint material (claims 2, 3) in a joining method based on welding (claim 4) to form such hermetic seals was notoriously old and well known at the time of invention; its use here is conventional and would have been obvious to the artisan.

As to claim 24: Ogiyu shows the endoscope substantially as claimed, including said second section 2 being an insertion unit, but fails to specify that the outer casing of the insertion unit 2 is made at least partially of a polymeric material. However, the Examiner takes official notice that it was notoriously old and well known at the time of invention to use such polymeric material in the outer casing of endoscope insertion section. The artisan would have found it obvious to use such conventional material in the endoscope of Ogiyu.

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c. Claims 7-9, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050) as applied to claim 6 above, further in view of Akiba et al. (5,894,369).

Ogiyu in view of Ueda fails to teach the details of the hermetic sealing. However, Akiba et al. teaches an analogous endoscope having a hermetically sealed imaging unit comprising a lens unit having hermetically locked optical windows L1, which is bared to form part of the outer casing of the endoscope, and 12, which is joined with the image input end of the solid state imaging device by an adhesive (col. 4, lines 60-62). It would have been obvious to the artisan to further modify Ogiyu to arrive at the claimed invention by employing the hermetically sealed imaging unit of Akiba et al. since Akiba et al. teach such to provide the desired hermetic seal.

d. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050) and Akiba et al. (5,894,369) as applied to claim 13 above, further in view of the Examiner's official notice.

Akiba et al. fails to specify a transparent adhesive. However, the Examiner takes official notice that it was notoriously old and well known at the time of invention to join an optical window to a solid-state imaging device using a transparent adhesive. The use of such adhesive here is conventional and its use here would have been obvious to the artisan.

e. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050) as applied to claim 6 above, further in view of Tetsumaru et al. (JP 6-209898).

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Ueda fails to show the claimed arrangement of the first and second optical members. However, Tetsumaru et al. teaches the claimed arrangement (see Fig. 1). It would have been obvious to the artisan to further modify Ogiyu by arranging the optical members as taught by Tetsumaru et al. since Tetsumaru et al. teach such to be advantageous.

f. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogiyu (JP 62-40413) in view of Ueda (JP 59-129050) as applied to claim 27 above, further in view of Pollack (5,992,728).

Ueda fails to teach the details of the airtight joining means. However, Pollack teaches such joining means to provide a hermetic seal. It would have been obvious to further modify Ogiyu by using the airtight joining means of Pollack since Pollack teaches that such would better withstand autoclaving.

Response to Arguments

4. Applicant argues that Ueda does not disclose a hermetically sealed unit composed of a plurality of airtight partition members which hermetically join to one another. However, this is not the case. As set forth above, Ueda discloses a hermetically sealed unit composed of a plurality of airtight partition members 15, 22 and 24 which hermetically join 23 to one another.

5. Applicant argues that Ueda does not state that the airtight casing is formed at a higher sealing level than the water-proof endoscope body. However, the artisan would

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understand the term airtight to inherently indicate a higher sealing level than water-proof because water-proofness does not imply airtightness.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Mulcahy whose telephone number is (703) 308-3134. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. M. Dvorak can be reached on (703) 308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3591 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0873.

John M. Mulcahy
Primary Examiner
Art Unit 3739



John Mulcahy
September 13, 2002